KOMATSU®

MINI-EXCAVATOR

PC35MR-5

ENGINE POWER
· 18.2 kW / 24.4 hp @ 2,200 r.p.m.

OPERATING WEIGHT
· 3,725 kg

BUCKET CAPACITY
· 0.04 - 0.12 m^3

Photos of the equipment are referential, may include optional equipment.

PC35MR-5
WALK-AROUND

ENGINE POWER 24,4 hp

POWERFUL AND ENVIRONMENTALLY FRIENDLY

- Komatsu fuel-saving technology.
- 6 selectable working modes.
- Auto-deceleration and idle shutdown.
- Dial type fuel control.

FIRST-CLASS COMFORT

- Newly designed cab
- Improved operator convenience.
- Multi-function monitor with high resolution 3.5" LCD color display.
- Multiple accessories around the operator's seat.

SAFETY FIRST

- Neutral position detection system.
- Emergency engine stop switch.
- Seat belt caution indicator.
- Large transport tie down points.

EASY MAINTENANCE

- Tilting cab.
- Wide opening engine hood.
- Maintenance information displayed on the monitor.

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INCREASED FUEL EFFICIENCY AND ENVIRONMENTAL PERFORMANCE

POWERFUL AND ENVIRONMENTALLY FRIENDLY

» Work in tight spaces

» The new short-tail PC35MR-5 delivers optimal power and digging speed, even in confined spaces where traditional machines can't work: yards, road works, demolition sites, sewers, etc. Sturdy and very stable, it guarantees maximum safety and offers complete operator confidence in any working conditions.

» Komatsu CLSS

» The CLSS (Closed-centre Load Sensing System) hydraulic circuit guarantees power, speed and perfect control to all movements, including simultaneous ones. The combination of the variable displacement pump and of CLSS allows operators to perform all required movements with maximum efficiency, regardless of the load or rpm.

» 6 working modes

» Depending on the load, operators can conveniently choose between 6 working modes designed to match engine speed, pump delivery and system pressure. Priority can be given either to speed, for more productivity, or to fuel consumption for lighter applications.

MAXIMIZED EFFICIENCY

»Customisation

»Many configurations are available, so you can choose the perfect machine for the job: long or short arm, rubber, steel or roadliner shoes. The 1 / 2 way auxiliary hydraulic circuit allows the use of a wide range of working tools such as a hammer, a clamshell bucket, an auger etc.

»Electronic control system

»Fuel consumption on the PC35MR-5 is lower by up to 5%. The engine and hydraulic system are optimally controlled according to the operating conditions. The hydraulic loss reductions also help reduce both fuel consumption and environmental impact.

»Auto deceleration and auto idle shutdown

»Both these functions are provided as standard. Auto-deceleration reduces the engine speed automatically a few seconds after the work equipment lever is moved to the neutral position. The auto idle shutdown automatically stops the engine after a preset time to reduce unnecessary fuel consumption.

FIRST-CLASS COMFORT

»An optimal work environment

»Despite its compact size, the PC35MR-5 offers unequalled comfort. The spacious cab was developed with exceptional care to details, and the work environment is quiet and comfortable. Special attention is given to the operator: ergonomic and dedicated PPC controls, and, in option, an efficient air conditioning and ventilation system to guarantee optimal thermal comfort. A much larger cab door makes cab access a lot easier.

»Perfect operator convenience

»Proportional controls are fitted as standard for safe and precise operation of attachments. The dial type fuel control makes operation and engine speed adjustment simple. The automatic travel speed shift function allows smooth and efficient operation. Pressing a speed selector button on the blade lever chooses auto 2-speed or fixed 1st speed travel for easy shifting during blade operation. A 12-volt power port is also included in the cab.

»New multi-function monitor with more Information

»A high-definition 3.5" LCD monitor provides excellent visibility. The highdefinition LCD panel is less affected by the viewing angle and surrounding brightness, ensuring excellent visibility. Various alerts and machine information are displayed in a simple format. Useful information such as operation records, machine setting and maintenance data are also provided. The operator can easily switch screens.

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EASY MAINTENANCE

» Rear bonnets for quick engine checks, simple inspections, cleaning of the radiators and easy access to the battery.

» Convenient and save fuel and oil refilling under the front bonne.

» Large fuel filter and fuel pre-filter with water separator protect the engine.

» The multifunction monitor panel provides the operator with maintenance and service information.

» Tilting cab

» The wide opening engine bonnets provide a quick access to daily inspection points. The fuel and the hydraulic oil tanks are located under the side bonnet, in a safe and easyto-reach position. In addition, the cab easily tilts back for major maintenance tasks.

» Easier repairs

» ORFS hydraulic face seal connectors and DT electrical connectors enhance the machine's reliability and make repairs faster and easier. High durability bushings and a 500 hours engine oil change interval further lower operating costs.

» Please check this information with your local Distributor.

HIGHEST RELIABILITY AND SAFETY

»X-frame

»The X-frame ensures maximum stress resistance and optimal stress distribution. Its shape makes the machine a lot more rigid and reliable. In addition, it facilitates the regular undercarriage cleaning operations and the spoils removal process.

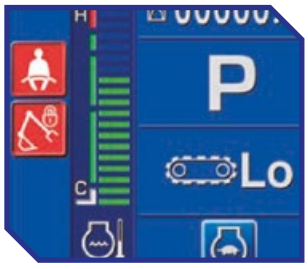
»Smallest swing radius

»The extra-small swing radius with minimum rear protrusion from the tracks (80 mm for PC35MR-5) allows the operator to concentrate on work in confined areas.

»Maintenance monitoring

»Maintenance and service activities are tracked on the monitor. When the time before a maintenance interval dips below 30 hours, a maintenance reminder light shows on the display.

» Secondary engine shut down switch.



» Seat belt caution and neutral position detection system caution.

» Hose burst valves on boom and arm cylinders.

SPECIFICATIONS

ENGINE

MODEL	Komatsu 3D88E-7.
TYPE	Water-cooled, 4-cycle direct injection.
ENGINE POWER	
at rated engine speed	2,200 r.p.m.
ISO 14396	18.2 kW / 24.4 hp.
ISO 9249 (net engine power)	17.4 kW / 23.3 hp.
NO. OF CYLINDERS	3.
BORE X STROKE	88 × 90 mm.
DISPLACEMENT	1,642 cm³.
MAX. TORQUE / ENGINE SPEED	105.1 Nm / 1,440 r.p.m.
AIR FILTER TYPE	DRY.

Fully complies with EU Stage 3A exhaust emission regulations.

HIDRAULIC SYSTEM

TYPE	KOMATSU CLSS.
MAIN PUMP	2 x variable displacement pump.
MAXIMUM PUMP FLOW	35.7 × 2 + 18.7 + 9.9 l/min.
MAX. OPERATING PRESSURE	27.0 MPa (270 bar).
HYDRAULIC MOTORS	
Travel	2 x variable displacement motor.
Swing	1 x fixed displacement motor.
DISPLACEMENT	2,189 cm³.
HYDRAULIC CYLINDERS (BORE X STROKE)	
Boom	80 × 585 mm.
ARM	75 × 595 mm.
BUCKET	65 × 490 mm.
BOOM SWING	95 × 482 mm.
BLADE	95 × 140 mm.
BUCKET DIGGING FORCE (ISO 6015)	2,990 daN (3,050 kg).
ARM CROWD FORCE (ISO 6015)	
1,370 mm arm	2,058 daN (2,100 kg).
1,720 mm arm	1,637 daN (1,670 kg).

OPERATING WEIGHT (APPR.)

Operating weight, including cabin, specified work equipment, operator, lubricant, coolant, full fuel tank and the standard equipment.
Canopy (optional): -150 kg.

RUBBER SHOES	3,725 kg.
ROADLINER SHOES	3,855 kg.
STEEL SHOES	3,835 kg.

DRIVES AND BRAKES

STEERING CONTROL	2 levers with pedals giving full independent control of each track.
DRIVE METHOD	Hydrostatic.
HYDRAULIC MOTORS	2 × axial piston motor.
REDUCTION SYSTEM	Planetary gear.
MAX. TRAVEL SPEEDS Lo / Hi	2.6 / 4.6 km/h.
MAXIMUM DRAWBAR PULL	3,335 daN (3,400 kgf).

UNDERCARRIAGE

CONSTRUCTION	X-frame centre section with box section track frames.
ROLLERS	
Track rollers (each side)	4.
Carrier rollers (each side)	1.
SHOE WIDTH	300 mm.
GROUND PRESSURE (STANDARD)	0,36 kg/cm².

SWING SYSTEM

The rotation is operated by means of an orbital hydraulic motor. Single ball-bearing ring with internal, induction hardened toothring. Centralised lubrication of the unit.

SWING SPEED	9.0 r.p.m.

BLADE

TYPE	Electro-welded, single unit structure.
WIDTH X HEIGHT	1,740 × 355 mm.
BLADE, MAX. LIFTING HEIGHT	360 mm.
BLADE, MAX. DIGGING DEPTH	390 mm.

SERVICE REFILL CAPACITIES

FUEL TANK	41 L.
RADIATOR	3.3 L.
ENGINE OIL (REFILL)	7.2 L.
HYDRAULIC SYSTEM	39 L.

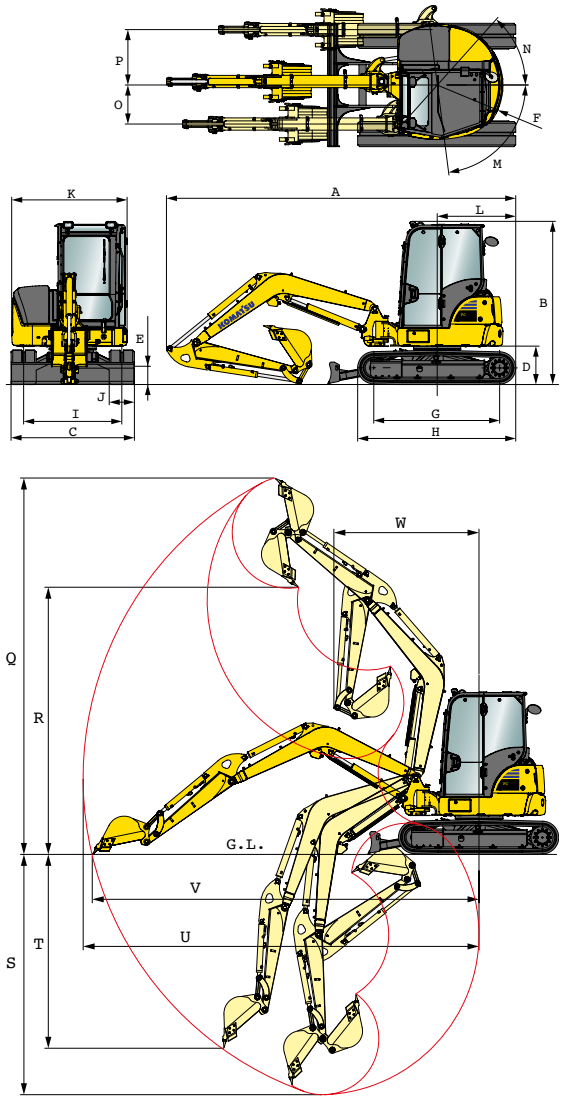
ENVIRONMENT

NOISE LEVELS	
LwA external	96 dB(A) (2000/14/EC Stage II).
LpA operator ear	77 dB(A) (ISO 6396 dynamic test).
VIBRATION LEVELS (EN 12096:1997)	
Hand/arm	≤ 2.5 m/s² (uncertainty K = 0.58 m/s²).
Body	≤ 0.5 m/s² (uncertainty K = 0.22 m/s²).

Contains fluorinated greenhouse gas HFC-134a (GWP 1430).
Quantity of gas 0.6 kg, CO2 equivalent 0.86 t.

DIMENSIONS & WORKING RANGE

	Boom length	2,540 mm
	Arm length	1,370 - 1,720 mm
A	Overall length	4,825 - 4,905 mm
B	Overall height	2,560 mm
C	Overall width	1,740 mm
D	Clearance under counterweight	545 mm
E	Ground clearance	290 mm
F	Tail swing radius	950 mm
G	Track length on ground	1,650 mm
H	Track length	2,105 mm
I	Track gauge	1,440 mm
J	Shoe width	300 mm
K	Overall width of upper structure	1,500 mm
L	Distance, swing center to rear end	1,050 mm
M/N	Boom swing angle	75 / 55°
O	Boom offset LH	580 mm
P	Boom offset RH	770 mm
Q	Max. digging height	5,000 - 5,270 mm
R	Max. dumping height	3,530 - 3,790 mm
S	Max. digging depth	3,110 - 3,455 mm
T	Max. vertical wall digging depth	2,690 - 3,210 mm
U	Max. digging reach	5,300 - 5,640 mm
V	Max. digging reach at ground level	5,170 - 5,520 mm
W	Min. swing radius	2,030 - 2,140 mm
	Min. swing radius at boom swing	1,600 - 1,700 mm



LIFTING CAPACITIES

PC35MR-5 cab (canopy), rubber shoes, over side, blade up, 80 kg bucket*

Arm length	A / B		MAX.	4,0 m	3,0 m	2,0 m
1,370 mm	3.0 m	kg	530 (450)	530 (450)		
	2.0 m	kg	430 (360)	520 (440)	840 (730)	
	1.0 m	kg	390 (330)	510 (430)	790 (680)	
	0.0 m	kg	400 (330)	490 (410)	750 (640)	990 (990)
	-1.0 m	kg	450 (380)	480 (400)	740 (630)	990 (990)

Arm length	A / B		MAX.	4,0 m	3,0 m	2,0 m
1,720 mm	3.0 m	kg	450 (380)	530 (450)		
	2.0 m	kg	380 (310)	520 (440)	690 (690)	
	1.0 m	kg	350 (290)	500 (420)	800 (680)	
	0.0 m	kg	350 (290)	480 (400)	750 (640)	990 (990)
	-1.0 m	kg	390 (320)	470 (390)	730 (620)	990 (990)

A Reach from swing centre

B Bucket hook height

Lifting capacities, including bucket, bucket linkage and bucket cylinder.

Ratings are based on ISO standard 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Excavators used in object handling operations must comply with the related local regulations and must be equipped with hose burst valves (boom & arm) and an overload warning device in compliance with EN474-5.
- The values marked with an asterisk (*) are limited by the hydraulic capacities.
- Calculations are based on the machine resting on a uniform and firm surface.
- The lifting point is a hypothetical hook placed behind the bucket.

STANDARD EQUIPMENT

ENGINE
- Komatsu 3D88E-7 water-cooled, 4-cycle direct injection diesel engine.
- EU Stage 3A compliant.
- Fuel control dial.
- Auto-deceleration function.
- Auto idle shutdown.
- Alternator 12 V / 40 A.
- Starter motor 12 V / 2.3 kW.
- Battery 12 V / 75 Ah.

HYDRAULIC SYSTEM
- 6-working mode selection system; power mode, economy mode, breaker mode, attachment power and attachment economy mode, and lifting mode.
- Adjustable PPC wrist control levers for arm, boom, bucket and swing, with proportional control for attachments.
- PPC control lever and pedals for steering and ravel.
- Hydraulic line for hammer and for 2-way equipment up to boom and arm (HCU-A).
- Automatic two-speed travel control.

UNDERCARRIAGE
- 300 mm steel shoes.

CABIN
- ROPS (ISO 3471) / FOPS (ISO 10262) tilting cab with heating, skylight, pull-up type front window with locking device, lower window, front window wiper with intermittent feature, floor mat.
- Adjustable suspension seat with retractable seat belt.
- Monitor panel 3.5" colour display.
- 12 Volt power supply.
- Beverage holder and magazine rack.
- Air conditioning.

SERVICE AND MAINTENANCE
- Multi-function video compatible colour monitor with Equipment Management and Monitoring System (EMMS) and efficiency guidance.
- Battery main switch.
- KOMTRAX.

WORK EQUIPMENT
- Boom.
- Blade.
- 1,375 mm digging arm (PC35MR-5).
- Boom cylinder protection guard.
- Protection for boom safety valve.

SAFETY EQUIPMENT
- Travel acoustic alarm.
- Electric horn.
- Rear-view mirrors (left and right side, right rear).
- Hose burst valves on boom and arm cylinders.
- Overload warning device.
- Emergency engine stop switch.
- Neutral position detection system.
- Seat belt caution indicator.
- Rotating beacon.

LIGHTING SYSTEM
- Working light on boom.
- Two front working lights on cab.
- Rear working light on cab.

OTHER EQUIPMENT
- Standard colour scheme and decals.
- Parts book and operator manual.
- Special waxing.

ATTACHMENTS
- Bucket range (300 - 700 mm).

OPTIONAL EQUIPMENT

- Relief valves on service spool.
- Preparation for hydraulic quick-coupler.
- 2nd auxiliary hydraulic circuit (HCU-C).
- 3rd auxiliary circuit for hydraulic powertilt.
- 300 mm. roadliner shoes.
- 300 mm. rubber shoes.
- Radio equipment + radio.
- Canopy.
- 1,720 mm. digging arm.
- Bucket linkage with lifting eye.
- Blade cylinder safety valve.

The PC35MR-5 is equipped in accordance with the safety regulations of the machinery guidelines 89/392 EWG ff and EN474.

Optional equipment may not be available in your country. Please contact your Distributor for further information.

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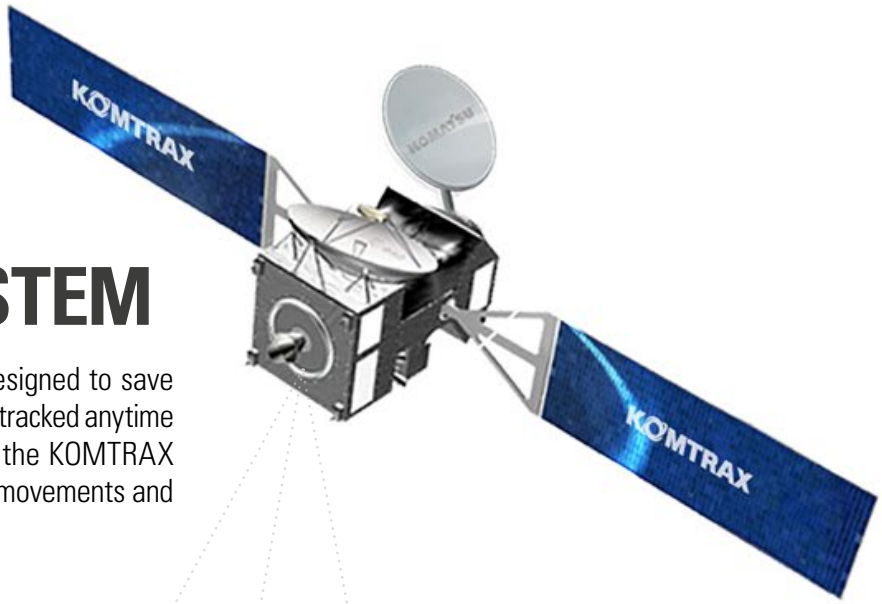

SATELLITE MONITORING SYSTEM

KOMTRAX is a revolutionary tracking system designed to save time and money. Nowadays, the equipment can be tracked anytime and anywhere. This valuable data, received via the KOMTRAX website, can be used to optimize planning of the movements and performance of the equipment.

CHARACTERISTICS

» MACHINE WORKING TIME

With the "Daily Working Record" chart, get precise engine running time data:when your machine was startedandwhen it was shut down, as well as total engine running time.

» FLEET LOCATION

The machine list instantly locates all your machines, even those in other countries.

» ALARM NOTIFICATIONS

You can receive notification of alarms both via the KOMTRAX website and by e-mail.

» ADDED SECURITY

The "Engine Lock" feature allows to program when a machine's engine can be started. And with "Geofence", KOMTRAX sends notification every time your machine moves in or out of a predetermined operating area.

Check with your Komatsu dealer for the information available for your model and service availability in your country.

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For further information, contact your distributor or visit our website **www.komatsulatinoamerica.com**

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